
COUNTY OF CUMBERLAND.

LOCAL GOVERNMENT ACT, 1888.

Summaries of the Annual Reports of the Local Medical Officers of Health of each of the Sanitary Districts of the County, several Tables of Vital Statistics relating to Cumberland and Report thereon prepared by Henry Barnes, M.D., F.R.S.E., Carlisle, at the request of the General Purposes Committee.



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REPORT OF DR. BARNES.

To the General Purposes Committee of the Cumberland
County Council.

Gentlemen,

In accordance with your request I have prepared summaries of the Annual Reports of the Medical Officers of Health of all the Sanitary Districts of the County for the year 1893. In doing so I have deviated slightly from the plan of previous years, and by a slight re-arrangement of the matter I have been able, without occupying more space, to give fuller details of several important points. Each summary, it will be seen, is now divided into three sections; in the first, full particulars regarding the area, vital and mortal statistics, &c., are placed; in the second, reference is made to the prevalence of such diseases as affect the death rate of the district; and in the third will be found such points as seem deserving of notice in connection with the sanitary inspections which have been made during the year.

I have compiled several tables illustrative of the vital statistics of the districts, and have added some new columns to Table I which will, I think, be of interest.

For the purposes of sanitary administration the County is now divided into 26 Sanitary Districts. In 1892 there were only 25, the increase being due to the fact that Aspatria was separated from the Wigton Rural District during the latter part of the year, and constituted into an Urban District under a Local Board. Of the 26 Districts 15 are Urban Sanitary Districts with an aggregate population of 153,608, 10 are Rural Sanitary Districts with a total population of 114,718, and one is a Port Sanitary District (Workington Port).

In 1892 the population of the Urban Districts was 149,355, and of the Rural Districts 117,199. The falling off in the population of the Rural Districts in 1893 is accounted for by the separation of Aspatria from the Wigton Rural District above referred to.

The total population of the County upon which the vital statistics are based is 268,326, being an increase of 1,772 over the previous year, but a decrease of 808 on that which was found in the census year (1891), viz., 269,134.

The area of the several Sanitary Districts is given this year for the first time, and amounts to 997,473 acres. The largest Sanitary District is Penrith Rural—180,674 acres, and the smallest is Maryport—297 acres.

In comparing the vital statistics with those of the preceding year it will be found that the average birth rate in Urban Districts is lower than in 1892, and that year was also lower than the preceding one. In 1891 the birth rate was 33.37, in 1892 it fell to 32.36, and

now it stands at 31.37, a fall of 2 per 1000 in the three years. The birth rate is also lower in Rural Districts this year, the figures for the last three years being 26.5 in 1891, 27.26 in 1892, and 25.54 in 1893. The cause of this fall in the birth rate is doubtless due to the general depression in trade, and is most marked in those centres of industrial activity in the west of the County, where the population has decreased, and which have suffered so much from commercial and labour troubles. The death rate in Urban Districts is higher this year, being 17.11 as against 16.86, but in Rural Districts it is lower, viz., 15.85 against 17.25 in 1892. There is a slight increase in the infant mortality rate in Urban Districts, but a marked diminution in the Rural Districts, due mainly to the remarkably low rate in the Alston No. 1 District, where only one death occurred under one year of age.

In order to compare the Urban and Rural Districts of Cumberland as regards their statistics, I have compiled the following table, which contrasts the vital and mortal statistics of Cumberland with those of England and Wales, of 33 largest English towns, and of the neighbouring County of Dumfries, having received from your Clerk a copy of the Annual Report of the Medical Officer of Health of that County for 1893.

| | | Birth rate per 1,000 of the Population. | Death rate per 1,000 of the Population. | Zymotic rate per 1,000 of the Population. | Rate of Infant Mortality measured by the proportion of Deaths under one year to 1,000 Births. | |
|-------------------------------------|---------|--|--|--|--|-------|
| England and Wales | ... | 30.8 | 19.2 | 2.47 | 159 | |
| Thirty-three large English Towns | ... | 31.9 | 21.6 | 3.2 | 181 | |
| County of Dumfries | ... | 25.6 | 16.1 | 1.6 | 113 | |
| County of Cumberland | { Urban | ... | 31.37 | 17.11 | 1.77 | 150.4 |
| | { Rural | ... | 25.54 | 15.85 | 1.15 | 95.36 |

A careful survey of the above figures shows that the comparison is not unfavourable to Cumberland. Our average Urban birth rate is higher than that of England and Wales, and nearly as high as that of the 33 largest English Towns, which are grouped together by the Registrar General for statistical purposes. (The smallest of these towns has a population of 84,298, and the largest 4,306,411.) Our average Urban death rate is some points lower than that of England and Wales and of the largest towns, and only a little higher than the neighbouring county of Dumfries. Our zymotic and infant mortality rates also bear favourable comparison with other districts, the rural infantile rate being the lowest of all.

On referring to Table II it will be seen that the death rate in 1893 was higher in 7 of the Urban Districts and in 3 of the Rural Districts than in the previous year; in one only it was the same, and in the remainder there was a decrease. There is no death rate for the past year so high as that recorded for Alston No. 1 in 1892, viz., 25.7, and this year the same district has a rate of only 13.4. Among the higher rates for the year may be mentioned Carlisle, which is at the top with a rate of 21.6, the same as that recorded for the 33 largest English towns, Carlisle (Rural) 19.4, Aspatria 19.3, Penrith (Urban) 19.2, Cockermouth (Urban) 18.5, Maryport 18.6, and Whitehaven (Urban) 18.7. The lowest death rate for the year was 9.2, and occurred in the Holme Cultram Urban District, which includes Silloth, and is mentioned as the lowest death rate which has been reported since 1881. Among other districts which have low rates of mortality are Cockermouth (Rural) 13.2, Alston I 13.4, Penrith (Rural) 13.4, Cleator Moor 13.5, and Wigton (Rural) 13.7.

The highest zymotic rates for the year occurred at Carlisle (3.6), Millom (3.8), and Brampton (3.28). The lowest zymotic death rates were Holme Cultram 0.2, and Penrith (Rural) 0.2.

I have this year introduced into the first table, for purposes of comparison, the death rate from phthisis and for respiratory diseases (bronchitis, pleurisy, and pneumonia). I find these rates mentioned in only a few of the reports, but from the list of deaths furnished in the official tables accompanying the reports I have been able to calculate the results for those Sanitary Districts where the point has not been noticed. I am not able to give the death rate from tubercular diseases other than phthisis, as in many of the reports these affections are not separately mentioned in the list of deaths. If a full comparison of this kind could be continued for a few years some interesting results would be obtained. It would not be fair to draw any conclusion from a single year's returns on this subject, but I hope that this reference to it may lead to more attention

being given to it in future years. The Medical Officer for the Longtown Rural District reports that "a notable decrease has taken place in the number of deaths from phthisis (consumption), the average number for the last 11 years being nearly 16, against 9 this year. I think this may be attributed to the attention which of late years has been given to ventilation, and the necessity for a dry soil and dwellings as factors in the prevention of this scourge." The Medical Officer of the Cockermouth Urban District refers to the unusually high death rate from phthisis in his district, and calls attention to overcrowding, defective ventilation, food insufficient in quantity and bad in quality, alcoholic intemperance, residence in damp houses on a damp soil, as important factors in the causation of the disease. He also suggests that as the air may be affected by the coughing of tuberculous patients, and that as the expectoration if not collected may become dried and thus infect the atmosphere, in all cases of consumption the sputa should be received into suitable vessels and either burnt or chemically disinfected. This is now a compulsory regulation in many health resorts to which phthisical patients resort, and is a reasonable precaution deserving of attention.

The Infectious Diseases (Notification) Act of 1889 has been adopted in a large proportion of the Sanitary Districts, and it is announced that the Workington Port Sanitary Authority intend to adopt it. Several Medical Officers express satisfaction at the manner in which it is worked and the benefit it confers upon the Districts which have adopted it. The Carlisle Rural Sanitary Authority appears to be the only one which includes measles as a disease which must be notified, and the Medical Officer, Mr. C. S. Hall, in his report refers with satisfaction to the benefit which has resulted. "It has been thought" he writes, "by some that the notification of measles was unnecessary, but in practice I have found it of much use in enabling schoolmasters and teachers to guard against needless risk and exposure." Until the Act has been adopted by all the Local Authorities no return of any value can be obtained of the number of cases of infectious disease present during the year in the county, but a few remarks on Table IV may be of use. This table shows the distribution of zymotic diseases during the year.

Scarlet Fever was again most prevalent. It appeared in 23 of the Sanitary Districts against 21 in the previous year. It was, however, generally of a mild type. At Aspatria there were 74 cases and 2 deaths; Cleator Moor, 82 cases, 2 deaths; Carlisle (Urban), 184 cases, 11 deaths; Cockermouth, 39 cases; Egremont, 53 cases, no deaths; Harrington, 34 cases, 2 deaths; Keswick, 44 cases, 3 deaths; Maryport, 53 cases, 3 deaths; Millom, 66 cases, 1 death; Penrith (Urban),

183 cases, 14 deaths; Whitehaven (Urban), 134 cases, 5 deaths; Brampton (Rural) 49 cases, 7 deaths; Whitehaven (Rural), 72 cases, no deaths; Workington, 306 cases, 7 deaths; Carlisle (Rural), 110 cases, 4 deaths; and Wigton (Rural), 121 cases, with 3 deaths.

Measles prevailed in 13 of the Sanitary Districts as against 15 in the previous year. As stated above, this disease is only notified in the Carlisle (Rural) District where 91 cases were reported, but no deaths. In the Carlisle Urban District, however, the disease was of a very bad type, and caused 77 deaths. It is this heavy mortality from measles which gives the Carlisle Urban District the highest death rate in the county for the year. In Brampton Rural District the disease assumed a malignant type. It is estimated there were at least 500 cases, and 22 deaths were recorded. In Millom the epidemic was severe, and 18 deaths occurred. In Cockermouth Rural District there were 5 deaths. In the other districts the disease was mild in type. Several Authorities closed the schools in consequence, and with good results.

Diphtheria was present in 15 Districts, being 1 more than in 1892. In the Carlisle Urban District there were 70 cases and 11 deaths; in Millom, 7 cases, 3 deaths; in Workington, 52 cases, 4 deaths; in Whitehaven there were 5 cases and no deaths. In many of the outbreaks no insanitary conditions were found.

Whooping Cough appeared in 16 Sanitary Districts, being 3 more than in the previous year. At Arlecdon and Frizington it caused 6 deaths; Cleator Moor, 10 deaths; in Whitehaven (Urban) 24 deaths; Wigton (Urban) 12 deaths, and Cockermouth (Rural) 10 deaths. Several infant schools in the latter district were closed for a limited period, owing to the prevalence of the epidemic.

Enteric Fever is reported from 17 Districts, an increase of 5 on the previous year. In the Carlisle Urban District there were 20 cases and 5 deaths; in Maryport, 5 cases, 3 deaths; in Workington 16 cases, 2 deaths; in Millom, 9 cases, 2 deaths. The cause of the outbreaks are similar to those stated in last report.

Diarrhœa is reported from 17 Districts as against 11 in 1892. In the report from Bootle it is stated that "in several parts of the District attacks of diarrhœa more or less severe and acute occurred, which led to considerable apprehension of a choleraic visitation, but by means of printed circulars giving descriptive particulars and symptoms of this epidemic, with advice and directions relatively and posted up and disseminated through the district, all feeling of unrest and anxiety was allayed."

Typhus Fever occurred in two Districts only; in the previous year it occurred in three Districts. In the Carlisle Urban District

only one case occurred which was promptly isolated. In Whitehaven, (Urban) also only one case occurred, the cause of which was inexplicable.

Small Pox is reported from 12 Districts, having only occurred in one in 1892. This large increase in the spread of the disease was anticipated, and many of the districts were quite prepared for it. In Penrith there were 10 cases and 2 deaths, in Carlisle (Urban) 11 cases, 1 death. In most instances the disease was introduced by tramps. An outbreak is recorded as having occurred at the Dalehead Post Office, Legburthwaite (Cockermouth Rural). There were 5 cases. The Post Office was closed and stringent measures adopted. It is conjectured that the infection was obtained from infected parcels passing through the Post. Three cases at Threlkeld (Penrith Rural) appeared to have been infected from this centre. Much attention has been given to vaccination and re-vaccination, and useful information of the protective influence of these measures is reported in connection with several of the outbreaks.

Influenza is reported as being present in several of the Districts both in the early and latter portions of the year, and appears to have influenced the death rate in some instances.

Anthrax.—An outbreak of this disease is reported at High Crosby (Carlisle Rural). The report is made by the chief Veterinary Inspector of the County. Along with this official the Medical Officer of Health of the District examined some of the blood of the dead animal and found unmistakable proofs of its having been a case of Anthrax. Under an order of the Board of Agriculture such outbreaks must be notified. The bacilli which cause the disease have been found in surface wells and also in the milk of cows affected. It seems possible, therefore, that the disease might be conveyed to the human subject if proper precautions were not taken.

Sanitary Improvements will be found recorded in several of the summaries, under the heading of "Sanitary Inspection."

Port Sanitation has occupied a good deal of attention in view of a possible invasion of Cholera, and will be found referred to in many of the reports. Port Sanitation at Whitehaven is still under the control of the Rural Sanitary Authority for that District, and this is regarded as unsatisfactory by the Urban District Authority, on the ground that the Rural Authority is not in touch with the Customs Officers and Harbour Officials.

Disinfecting Chambers.—The Medical Officer of the Wigton Union Rural Sanitary Authority (Dr. Briggs) reports on the need for a disinfecting chamber, to which people with infectious disease should be compelled to send all articles of clothing and bedding, the

expense of which in the case of the poor should be borne by the County, the chamber to be built by the County Council. He considers that the only effectual way in which disinfection can be done is by superheated steam in a disinfecting chamber. A steam disinfector has been erected near the Hospital site by the Millom Local Board.

Lectures on Infectious Diseases.—The Medical Officer of Bootle (Dr. Griffith) strongly urges that the County Council should originate and authorise a course of lectures to be given in every District by their respective Medical Officers of Health, on ‘Infectious Diseases—their cause, origin, the best means to combat them to prevent their spread and effect their suppression.’

The Police.—The valuable services rendered by the Police, under the direction of the Chief Constable, Mr. Dunne, is referred to in some of the reports in connection with the efforts of the Local Authorities to prevent the spread of Small Pox.

The following Sanitary Authorities, 15 in number, have sent in printed reports, viz.:—Arlecdon and Frizington, Aspatria, Carlisle (Urban), Cleator Moor, Cockermouth (Urban and Rural), Egremont, Harrington, Keswick, Whitehaven (Urban and Rural), Workington, Longtown, Penrith (Rural), and Wigton (Rural). The reports from the other Districts are in manuscript.

I am, Gentlemen,

Your obedient Servant,

HENRY BARNES, M.D.

Carlisle, June 21st, 1894.

TABLE I.

Vital Statistics relating to

| District. | Medical Officer of Health. | Area in Acres. | Population at all Ages. | |
|---------------------------------------|-------------------------------|-------------------|-------------------------|------------------------------------|
| | | | Census 1891. | Estimated to Middle of 1893. |
| <i>Urban.</i> | | | | |
| Arlecdon and Frizington } - | J. J. Lace - | 3,649 | 5,639 | 5,200 |
| Aspatria - - | W. Perry Briggs | 3,550 | 2,790 | 2,900 |
| Carlisle - - | Wm. Brown - | 2,029 | 39,200 | 40,150 |
| Cleator Moor - | John Eaton - | 2,946 | 9,464 | 9,464 |
| Cockermouth - | J. Robertson - | 2,424 | 5,320 | 5,350 |
| Egremont - - | G. Calderwood | 2,755.25 | 6,300 | 6,300 |
| Harrington - | James Dick - | 2,359.5 | 3,517 | 3,517 |
| Holme Cultram - | C. Macculloch- | 24,827 | 4,559 | 4,559 |
| Keswick - - | C. Gore Ring - | 733 | 3,905 | 4,078 |
| Maryport - - | James Little - | 297 | 8,700 | 8,700 |
| Millom - - | P. B. Stoney - | 1,311 | 8,857 | 9,268 |
| Penrith - - | D.G.P. Thomson | 7,587 | 8,981 | 9,157 |
| Whitehaven - | J. B. Fisher - | 723 | 18,038 | 18,000 |
| Wigton - - | T. A. Palm - | 774 | 3,965 | 3,965 |
| Workington - | John Highet - | 1,694 | 23,490 | 23,000 |
| Average of 15 Urban Districts | | | | |
| <i>Rural.</i> | | | | |
| Alston I - - | Stewart Carson | 12,000 | 1,709 | 1,709 |
| Alston II - - | E. W. Short - | 24,000 | 1,675 | 1,675 |
| Bootle - - | W. B. Griffith- | 91,688 | 5,982 | 5,982 |
| Brampton - - | Wm. Symington | 97,705 | 9,754 | 9,754 |
| Carlisle - - | C. S. Hall - | 67,898 | 16,009 | 16,000 |
| Cockermouth - | J. Robertson - | 164,081 | 29,497 | 30,642 |
| Longtown - - | S. F. Mc. Lachlan | 94,173 | 7,181 | 7,181 |
| Penrith - - | D. G. P. Thomson | 180,674 | 13,595 | 13,539 |
| Whitehaven - | J. B. Fisher - | 78,678 | 15,071 | 15,100 |
| Wigton - - | W. Perry Briggs | 108,918 | 15,936 | 13,136 |
| Average of 10 Rural Districts. | | | | |

TABLE I.

Cumberland in 1893.

| Rates per 1000 of Estimated Population. | | | | | Infant Mortality. Deaths under One Year per 1,000 Births. |
|---|----------------|------------------|---------------------------------|--|--|
| Birth Rate. | Death Rate. | Zymotic Rate. | Death Rate from Phthisis. | Death Rate from Respiratory Diseases. | |
| 39.61 | 17.50 | 1.15 | 1.53 | 4.23 | 189.0 |
| 26.89 | 19.30 | 1.03 | Nil | 3.10 | 205.0 |
| 34.50 | 21.60 | 3.60 | 1.19 | 3.13 | 178.0 |
| 32.30 | 13.50 | 2.20 | 1.30 | 2.40 | 150.0 |
| 29.70 | 18.50 | 2.05 | 2.05 | 4.48 | 201.2 |
| 32.53 | 16.19 | 0.79 | 0.95 | 3.00 | 107.3 |
| 28.42 | 14.48 | 0.85 | 0.85 | 2.50 | 80.0 |
| 20.10 | 9.20 | 0.2 | 0.87 | 0.65 | 97.7 |
| 31.11 | 18.14 | 1.96 | 0.73 | 2.94 | 140.6 |
| 33.90 | 18.60 | 2.6 | 1.26 | 2.98 | 155.9 |
| 36.40 | 18.002 | 3.80 | 1.60 | 4.20 | 185.0 |
| 30.63 | 19.22 | 2.07 | 1.80 | 1.70 | 120.9 |
| 29.00 | 18.77 | 2.05 | 1.60 | 4.27 | 145.5 |
| 29.76 | 17.65 | 1.00 | 2.00 | 4.28 | 169.4 |
| 35.70 | 16.00 | 1.30 | 0.95 | 2.04 | 131.1 |
| 31.37 | 17.11 | 1.77 | 1.24 | 3.06 | 150.4 |
| 21.00 | 13.40 | 1.17 | 1.17 | Nil | 27.7 |
| 26.86 | 17.91 | 0.59 | 1.78 | 2.38 | 88.8 |
| 20.80 | 18.22 | 1.60 | 0.50 | 2.60 | 122.0 |
| 23.68 | 17.32 | 3.28 | 0.92 | 2.35 | 116.8 |
| 26.00 | 19.40 | 0.90 | 1.93 | 2.00 | 100.7 |
| 30.80 | 13.20 | 1.14 | 0.75 | 2.74 | 122.6 |
| 24.92 | 15.87 | 1.25 | 1.25 | 2.36 | 88.2 |
| 27.00 | 13.40 | 0.22 | 0.60 | 2.50 | 95.6 |
| 29.33 | 16.09 | 0.99 | 1.52 | 3.84 | 121.8 |
| 25.10 | 13.70 | 0.39 | 0.99 | 1.83 | 69.4 |
| 25.54 | 15.85 | 1.15 | 1.14 | 2.26 | 95.36 |

TABLE II.

Table of Mortal Statistics relating to Cumberland for last five years.

| District. | DEATH RATE. | | | | |
|--------------------------------|-------------|-------|-------|-------|--------|
| | 1889. | 1890. | 1891. | 1892. | 1893. |
| <i>Urban.</i> | | | | | |
| Arlecdon and } Frizington } | - - 16.96 | 18.66 | 13.65 | 13.88 | 17.50 |
| Aspatria - - - | - - - | - - - | - - - | - - - | 19.3 |
| Carlisle - - - | - - - 18.1 | 19.5 | 20.1 | 20.25 | 21.6 |
| Cleator Moor - - - | - - - 10.3 | 17.7 | 18.06 | 15.5 | 13.5 |
| Cockermouth - - - | - - - 19.1 | 17.3 | 20.3 | 17.8 | 18.5 |
| Egremont - - - | - - - 12.46 | 12.78 | 13.96 | 16.34 | 16.19 |
| Harrington - - - | - - - | - - - | 18.41 | 17.34 | 14.48 |
| Holme Cultram - - - | - - - 20.18 | 17.93 | 21.05 | 16.45 | 9.2 |
| Keswick - - - | - - - 18. | 17.1 | 17.06 | 14.25 | 18.14 |
| Maryport - - - | - - - 24.1 | 27.6 | 18.5 | 20. | 18.6 |
| Millom - - - | - - - 17.5 | 15. | 14.67 | 13.06 | 18.002 |
| Penrith - - - | - - - 18.8 | 17.5 | 21.6 | 16. | 19.22 |
| Whitehaven - - - | - - - 22.8 | 19.44 | 26.34 | 16.79 | 18.77 |
| Wigton - - - | - - - 24.56 | 17.5 | 27.63 | 22.41 | 17.65 |
| Workington - - - | - - - 18. | 19.3 | 16.6 | 16. | 16. |
| <i>Rural.</i> | | | | | |
| Alston I - - - | - - - 17.9 | 13.9 | 21.65 | 25.7 | 13.4 |
| Alston II - - - | - - - 18.94 | 20.5 | 16.12 | 16.7 | 17.91 |
| Bootle - - - | - - - | 23.4 | 17. | 13.71 | 18.22 |
| Brampton - - - | - - - 15.9 | 14.1 | 15.7 | 18.3 | 17.32 |
| Carlisle - - - | - - - 17.1 | 16.4 | 19.1 | 21.3 | 19.4 |
| Cockermouth - - - | - - - 16.9 | 17.7 | 17.8 | 14. | 13.2 |
| Longtown - - - | - - - 15.65 | 19.18 | 17.26 | 17.12 | 15.87 |
| Penrith - - - | - - - 15.1 | 13.6 | 16.2 | 14.7 | 13.4 |
| Whitehaven - - - | - - - 18.24 | 17.52 | 20.72 | 14.63 | 16.09 |
| Wigton - - - | - - - 13.4 | 15.8 | 16.6 | 16.4 | 13.7 |

TABLE III.

Zymotic Rate of Urban and Rural Districts in Cumberland for the last five years.

| District. | ZYMOTIC RATE. | | | | |
|-------------------------------|---------------|------|------|------|------|
| | 1889 | 1890 | 1891 | 1892 | 1893 |
| <i>Urban.</i> | | | | | |
| Arlecdon and Frizington } - - | 1.25 | 1.66 | 1.06 | .37 | 1.15 |
| Aspatria - - - | | | | | 1.03 |
| Carlisle - - - | 1.7 | 1.6 | 1.6 | 1.3 | 3.6 |
| Cleator Moor - - - | .67 | 1.34 | 3.16 | 2.7 | 2.2 |
| Cockermouth - - - | 2.09 | 1.39 | .18 | .93 | 2.05 |
| Egremont - - - | .307 | 1.20 | .79 | 2.06 | 0.79 |
| Harrington - - - | | | 1.7 | 1.99 | .85 |
| Holme Cultram - - - | | | 2.8 | .8 | 0.2 |
| Keswick - - - | | 4. | 2.56 | .5 | 1.96 |
| Maryport - - - | | 6.9 | 2.3 | 5.06 | 2.6 |
| Millom - - - | | | .4 | .5 | 3.80 |
| Penrith - - - | 2.3 | .6 | 1.2 | .6 | 2.07 |
| Whitehaven - - - | 4.47 | | 3.03 | .56 | 2.05 |
| Wigton - - - | | none | 2.34 | 3.91 | 1. |
| Workington - - - | | 1.7 | 1.4 | 1. | 1.3 |
| <i>Rural.</i> | | | | | |
| Alston I - - - | | | 2.8 | .58 | 1.17 |
| Alston II - - - | | | 3.5 | 1.19 | 0.59 |
| Bootle - - - | | | .5 | .33 | 1.6 |
| Brampton - - - | 1.3 | | .6 | .3 | 3.28 |
| Carlisle - - - | | | 1.5 | .9 | 0.9 |
| Cockermouth - - - | 3.3 | 1.98 | 2.13 | 1.58 | 1.14 |
| Longtown - - - | .63 | 1.13 | 1.13 | .97 | 1.25 |
| Penrith - - - | | | .4 | .14 | 0.22 |
| Whitehaven - - - | 1.49 | 1.03 | 1.45 | .52 | 0.99 |
| Wigton - - - | .8 | .3 | 1.19 | .8 | 0.39 |

TABLE IV.

Sanitary Districts in which the following Zymotic Diseases have occurred during the Year.

| Scarlet Fever. | Typhus Fever. | Enteric Fever. | Measles. | Diphtheria. | Whooping Cough. | Diarrhoea. | Smallpox. |
|---|---------------------------|--|--|---|---|--|---|
| Arlecdon and Frizington Aspatia Cleator Moor Carlisle U. Cockermouth U. Egremont Harrington Holme Cultram Keswick Maryport Millom Penrith U. Whitehaven U. Wigton U. Workington | Carlisle Whitehaven U. | Cleator Moor Carlisle U. Cockermouth U. Egremont Keswick Maryport Millom Penrith U. Whitehaven U. Wigton U. Workington Brampton Carlisle R. Cockermouth R. Longtown Penrith R. Wigton R. | Carlisle U. Cockermouth Holme Cultram Maryport Millom Penrith Bootle Brampton Carlisle R. Cockermouth R. Longtown Penrith R. Wigton R. | Cleator Moor Carlisle U. Harrington Keswick Maryport Millom Whitehaven U. Workington Alston I Brampton Carlisle R. Cockermouth R. Longtown Penrith R. Wigton R. | Arlecdon and Frizington Aspatia Cleator Moor Carlisle U. Cockermouth U. Egremont Harrington Maryport Penrith U. Whitehaven U. Workington Bootle Cockermouth R. Penrith R. Whitehaven R. | Aspatia Cleator Moor Carlisle U. Cockermouth U. Harrington Keswick Maryport Millom Penrith U. Whitehaven U. Wigton U. Workington Alston II Bootle Carlisle R. Cockermouth R. Whitehaven R. | Carlisle U. Cockermouth U. Egremont Holme Cultram Penrith U. Whitehaven U. Wigton U. Workington Bootle Cockermouth R. Penrith R. Wigton R. |

SUMMARIES OF REPORTS
OF
MEDICAL OFFICERS OF HEALTH
OF THE
26 SANITARY DISTRICTS OF CUMBERLAND
For 1893,
PREPARED BY
HENRY BARNES, M.D., F.R.S.E.

ARLECDON AND FRIZINGTON (URBAN).

Medical Officer of Health - - JAS. J. LACE.

Area in acres 3,649 (Arlecdon 1,569½, Frizington 2,079½).

Population, census 1891, 5,639; estimated to middle of 1893, 5,200 (Arlecdon 1,600, Frizington 3,600).

Birth rate for entire district 39.61. In Arlecdon 38.75, and in Frizington 40.00.

Death rate 17.50.

Zymotic rate 1.15.

Death rate from phthisis, 1.53, and from respiratory diseases, 4.23 per 1,000 of population; rate of deaths under one year to 1,000 births, 189.

There were 91 deaths recorded in the district during the year, being an increase of 16 upon the previous year, the increase being principally due to diseases of the respiratory organs and whooping cough. The deaths among infants have been higher than in any previous year since the Board was formed in 1882. Whooping cough of a very serious and fatal character became prevalent in September. It caused 6 deaths. The number of cases is not known but 96 cases came under the notice of the Medical Officer. Two cases of scarlatina were notified in November at Arlecdon. The source of infection was not traceable. Precautionary measures were taken and the disease did not spread.

Sanitary Inspection.—In addition to usual monthly reports a special report was presented to the Local Board in November, in which certain properties were scheduled, which had been found in a state so injurious to health as to be unfit for human habitation. There were 34 houses, with two exceptions, unoccupied. A large proportion of the condemned houses have been built within the last 20 years, and showed evidence that the speculative and jerry builders had been engaged in the work.

The annual report of Sanitary Inspector is appended. 1,110 inspections made, 49 nuisances reported, 50 yards new sewers laid, five houses connected with main sewer.

Several statistical tables are given, also meteorological table.

Rainfall at Braystones, 34.17.

ASPATRIA (URBAN).

Medical Officer of Health - - W. PERRY BRIGGS.

Area in acres 3,550.

Population, census 1891, 2,790; estimated to middle of 1893, 2,900.

Birth rate 26.89.

Death rate 19.3.

Zymotic rate 1.03.

Death rate from phthisis, nil, and from respiratory diseases, 3.10; rate of deaths under one year to 1,000 births, 205.

This is the first year in which Aspatria has presented a separate report, having previously been included in the Wigton Rural District. There were two deaths from scarlet fever, one from puerperal fever, and one from whooping cough. The high infantile mortality is partly accounted for by the fact that many infants only a few days old, weak and puny when born, die from some weakness of heredity. The low zymotic rate is satisfactory considering the fact that 74 cases of scarlet fever occurred. The highest death rate was in the fourth quarter when it reached 37.2. This appears to have been due mainly to deaths among old people.

Sanitary Inspection.—Very excellent and substantial work has been done. Reconstruction of houses, removal of refuse heaps adjoining public highways, filling up of insanitary ponds, and a good contribution towards a complete system of drainage has been brought about. Main and branch drainage incomplete, and plan is wanted for sewerage New Town and lower end of village. One common lodging house has been closed, and improvements made in another. Public scavenging has been adopted. Eighteen new street gulleys have been put in, and new drains at Bank End Cottages and Prospect. Six private drains and 11 trapped gulleys have been laid by private owners. Slaughter-houses have been well kept, six are registered. Dairies and lodging-houses regularly inspected. Four milk purveyors registered during year. Well at Crookie condemned. Inadequate supply of water at Springkeld mentioned. Section 83 of the Public Health Act has been brought into operation. The necessity of inspecting tramps is indicated. No Isolation Hospital exists.

Tables A and B are appended.

CARLISLE (URBAN).

Medical Officer of Health - - - WM. BROWN.

Area in acres 2,029.

Population, census 1891, 39,200.

Estimated population at midsummer, 40,150 ; density of population per acre, 19.8 ; population of St. Mary's Sub-district, 24,413 ; St. Cuthbert's do., 15,737.

Birth rate 34.5.

Death rate 21.6 ; zymotic rate 3.6 ; death rate from phthisis, 1.19, and from respiratory diseases, 3.13 per 1000 of the population ; rate of deaths under one year to 1000 births 178.

The total deaths numbered 868 as against 805 in the previous year. There were 42 deaths of persons not belonging to the district. If these are excluded a death rate of 20.5 is obtained. The measles epidemic which prevailed during the year caused 77 deaths, being the highest mortality from this cause during the last 20 years. One hundred and four cases of scarlet fever were reported, the disease being most prevalent in the last two quarters of the year. The mortality was 6 per cent. of the cases notified. There was strong probability that six cases were due to infected milk. Eleven cases of small pox were reported, all imported, except a plumber and his assistant, who caught the infection while working at the fever hospital. Schedules are given of the cases, showing the protective influence of vaccination. One case of typhus was reported, and 20 cases of typhoid fever notified. There were 70 cases of diphtheria in 52 houses, as compared with 48 cases in the previous year. Tabular statements with regard to typhoid and diphtheria are given, showing sanitary conditions present, and action taken in each case. Influenza prevailed near the end of the year, but was mild in type. There were 439 cases of infectious disease notified, and these are tabulated ; 43 cases were isolated at the Fever Hospital by the Authority.

Hospital Accommodation.—In consequence of threatened invasion of small pox an addition of 12 beds has been made at the Fever Hospital by the Authority.

Sanitary Inspection.—Eight hundred and eighteen ashpits and ashpit privies have been abolished. The whole of the factories in the City have been visited, and on the whole their condition is satisfactory. The Registered Lodging Houses were regularly inspected, and are reported as satisfactory. Twenty-three carcasses were condemned as unfit for food, 22 being affected with tuberculosis.

Several statistical tables are added.

CLEATOR (URBAN).

Medical Officer of Health - - - - JOHN EATON.

Area in acres 2,946.

Estimated population as at census of 1891, viz., 9,464.

Birth rate 32.3.

Death rate 13.5.

Zymotic rate 2.2.

Death rate from phthisis 1.3, and from respiratory diseases 2.4 per 1,000 of the population ; rate of deaths under one year to 1,000 births, 150.

There were 128 deaths during the year, and the zymotic prevalence included 133 cases and 21 deaths, these being due to whooping cough 10, influenza 4, diarrhœa 3, scarlet fever 2, diphtheritic croup 1, and chicken pox 1. About two-thirds of the cases of zymotic sickness reported were cases of scarlet fever, there being 82 cases. This disease was most prevalent during the last quarter. None of the cases were isolated in the Fever Hospital as their parents were unwilling, but precautionary measures were adopted. No local nuisances were found sufficient to account for the occurrence of the two cases of typhoid fever reported. In several instances nuisances were found in connection with the cases of diarrhœa and erysipelas. The average death rate since 1874 has been 16. and the zymotic rate for the same period 2.7. The tubercular rate is only about half what it was in the previous year.

Sanitary Inspection.—During the year 14 houses were condemned as unfit for habitation and closed. Measures suitable for adoption in view of a possible outbreak of small pox were set forth in a special report. There were two reports on the suitability of a house as a common lodging house and certain structural alterations recommended. There were 20 separate inspections of portions of district and numerous inspections of localities where zymotic sickness occurred. Several houses unfit for habitation are condemned in the report, and other nuisances indicated. The Surveyor reports “no sanitary improvements” during the year. The report of the Inspector of Nuisances deals with 230 nuisances. The treatment and disposal of the sewage of Cleator Moor is a question of the future.

Several tables of vital statistics are appended.

COCKERMOUTH (URBAN).

Medical Officer of Health - - JOHN ROBERTSON.

Area in acres 2,424.

Population, census 1891, 5320 ; estimated population, 5,350.

Birth rate 29.7.

Death rate 18.5.

Zymotic rate 2.05.

Death rate from phthisis, 2.05 ; and from respiratory diseases, 4.48 per 1,000 of the population ; rate of deaths under one year to 1,000 births, 201.2.

Excluding the Workhouse and one sudden death on the public highway—a non-resident—the deaths numbered 99. The increase over last year is mainly due to zymotic diseases and phthisis. To the latter cause 11 deaths were assigned. The causes of this disease are set forth and some useful preventive measures indicated. The infantile rate is excessively high, and is attributed to the insanitary condition of groups of houses which should be demolished and a more sanitary class of houses erected. Deaths of infants are attributed to defective ventilation and over-crowding. One case of small pox occurred, the infection being traced to a tramp. Measles occurred as an epidemic, but was mild in type. Some of the schools were closed for six weeks. Scarlet fever prevailed during a greater portion of the year, and All Saints school was closed for a month, which prevented its further spread but there were no deaths. Only one case of enteric fever occurred, and that in a tramp. Whooping cough was very prevalent during latter portion of the year and caused 3 deaths.

Sanitary Inspection.—Over-crowding was found in two houses, and three houses were declared unfit for habitation in consequence of structural defects. Attention is called to the noxious effluvia from some tan-pits, and also to some closets and ash-pits placed a few yards in front of dwellings. A thorough inspection of the town was made in September as a precaution against infectious diseases, and some preventive measures adopted. The question of the Isolation Hospital has been discussed. The model bye-laws of the Local Government Board are recommended for adoption. Particulars are given of the deaths in the Workhouse. The lodging houses and slaughter houses were regularly inspected. Sewerage deposits existed in sections along two of the streets, due to defective flushing.

A tabular statement by the Inspector is annexed and also several statistical tables.

EGREMONT (URBAN).

Medical Officer of Health - - GEORGE CALDERWOOD.

Area in acres 2,755.25.

Estimated population to middle of year, 6,300, same as census 1891.

Birth rate 32.53.

Death rate 16.19.

Zymotic rate 0.79.

Death rate from phthisis 0.95, and from respiratory diseases, 3.0 per 1,000 of the population; rate of deaths under one year to 1,000 births, 107.3.

During the year 102 deaths occurred, and of the five deaths due to zymotic causes, all occurring in Egremont, one was caused by croup, three by whooping cough, and one by dysentery. It is thought that one-fourth of the population suffered from influenza. Fifty-three cases of scarlet fever were notified, but no deaths are recorded. Whooping cough prevailed in an epidemic form and caused three deaths. There was one case of small pox, two of typhoid fever, two of croup, and four of erysipelas. The small pox patient came from Derbyshire, was isolated in the Galemire Fever Hospital, and effectual preventive measures adopted. During the two months the influenza prevailed the death rate rose to 28.5 and 33.8 respectively, but as only four deaths occurred from this cause it is suggested that other diseases have a malignity they do not possess at other times during the prevalence of this scourge. The death rate in Egremont was 16.19, in Bigrigg 10.93, in Scalegill 13.33, and in Moor Row 19.82.

Sanitary Inspection.—Considerable improvements have been effected during the year. All the houses at Bridge End except two have been connected with the main sewer, and where necessary supplied with W. C.'s. At Moor Row, John Street, William Street, and Back John Street have been put in a proper state of repair, and the pavements well channelled. Further improvements are needed, gullies being defective and untrapped, and a new sewer contemplated. At Scalegill the privies previously reported have been converted. The sewers are reported as working effectually, and the water supply abundant and pure. Systematic house to house inspection of district was made.

Several statistical tables are appended.

Rainfall at Braystones 34.17; rainfall at Bigrigg 44.025.

HARRINGTON (URBAN).

Medical Officer of Health - - - JAMES DICK.

Area in acres 2359.5.

Population, census 1891, 3,517; estimated to middle of 1893, 3,517.

Birth rate 28.42.

Death rate 14.48.

Zymotic rate .85.

Death rate from phthisis .85, and from respiratory diseases 2.5 per 1,000 of the population; rate of deaths under 1 year to 1,000 births, 80.

There were 51 deaths during the year. Five were the result of injuries, and had no connection with the sanitary condition of the district. The zymotic rate was due to the prevalence of scarlet fever and whooping cough, but both were of a mild type. There were 34 cases of scarlet fever, and 2 deaths. There was one death from whooping cough. A fairly severe epidemic of influenza occurred in the latter months of the year. The death rate under 5 years has decreased from 6.82 to 3.97.

Sanitary Inspection. The district has been inspected once a month. The nuisances reported have not been numerous. The main sewer has been extended to Copperas Hill, and each house has been supplied with a closet and a yard. Improvements have been made in the condition of the slaughter-houses. The water supply of the district has been improved and further improvements are under consideration at the highest part of the district where the supply has been uncertain. Nothing has been done to improve the condition of the private streets, which require serious and early consideration.

Several tables of vital statistics are appended.

HOLME CULTRAM (URBAN).

Medical Officer of Health - CHARLES MACCULLOCH.

Area in acres 24,827.

Population, census 1891, 4,559 ; estimated to middle of 1893, 4,559.

Birth rate 20.1.

Death rate 9.2.

Zymotic rate 0.2.

Death rate from phthisis .87, and from respiratory diseases, .65 per 1,000 of the population ; rate of deaths under one year to 1,000 births, 97.7.

During the year 41 deaths were registered. There was one fatal case of measles. A tramp from Whitehaven broke down with small pox in Holme Low, and was removed to Wigton Workhouse, where he died. Several cases of scarlet fever of mild type occurred in Holme Abbey District. Disinfectants were freely used, and in the case of the tramp the bedding and blankets were burned. In Holme Low, including Silloth, the death rate is the lowest since 1881.

Sanitary Inspection.—Several nuisances reported during the year have been abated. The slaughter and common lodging-houses at Silloth are kept in good sanitary condition, and the sewers are working very efficiently. A well at Southerfield is condemned, the water not being fit for domestic purposes, and a fresh well is suggested. Some nuisances at Newton Arlosh require attention.

Cholera Precautions.—Infected ships arriving at Silloth must anchor in Silloth Bay, half a mile from the shore. The Board have been unable to get proper title deeds to the site proposed for a Cholera Hospital, and are negotiating for another site.

Tables A and B are appended to the report.

KESWICK (URBAN).

Medical Officer of Health - - - C. GORE RING.

Area in acres 733.

Population, census 1891, 3905; estimated to middle of 1893, 4,078.

Birth rate 31.11.

Death rate 18.14; zymotic rate 1.96; death rate from phthisis .73; and from respiratory diseases 2.94 per 1,000 of the population; rate of deaths under one year to 1,000 births, 140.6.

The deaths registered during the year number 74, and of these 31 were under five years of age. Scarlet fever was prevalent during the latter period of year, but only caused one death. Diarrhœa caused the death of four infants. The deaths from respiratory diseases was higher than usual, owing to the prevalence of influenza. Five young children died through misadventure; one from suffocation, one from drinking ammonia, and three from eating putrid fish. Only six deaths took place by misadventure during the previous four years, whereas last year there were eight from this cause. There were 47 notifications; 44 of scarlet fever, 1 diphtheria, 2 enteric. The first case occurred in January, and no other cases until August, when several fresh centres of infection occurred. The greatest number of cases occurred in October, and St. John's Parish Schools were closed with good results. Two cases of typhoid occurred, one imported from Dublin, in the other the source was not traced. Influenza was the direct cause of one death.

Sanitary Inspection.—Active measures were taken for the inspection of suspected tramps, printed notices issued, and free vaccination offered in view of the widespread prevalence of small pox, but no cases appeared. Cholera precautions were also adopted, and the Parish Nurse consented to take charge for 24 hours of any suspected case. Arrangements are in progress for the erection of a Hospital with eight beds for infectious cases. Considerable sewerage improvements are reported. Nearly half-a-mile of sewer has been laid, from Browfoot to Rose Terrace, and sewers in Woolpack and Policeman's Yard have been renewed. The work of carrying the main sewer under the river in order to dispose of sewage by irrigation is making good progress. Systematic weekly inspections by one of the Sanitary Inspectors have been organised.

Tables A and B are appended.

MARYPORT (URBAN).

Medical Officer of Health - - - JAMES LITTLE.

Area in acres 297.

Population, census 1891, 8,700 ; estimated population to middle of 1893, 8,700.

Birth rate 33.9.

Death rate 18.6.

Zymotic rate 2.6 ; death rate from phthisis 1.26, and for respiratory diseases, 2.98 per 1,000 of the population ; rate of deaths under one year per 1,000 births, 155.9.

During the year 162 deaths were registered, and the heaviest mortality was in the first quarter. Scarlet fever has prevailed more or less continuously since 1890. The disease was mild in type, there being 53 notifications and 5 deaths, all in last quarter. There was only one case of diphtheria and it was fatal. There were 5 cases of enteric fever notified and 3 deaths, one being imported from Dublin. Measles caused 4 deaths, all in the third quarter. Whooping cough was very prevalent during the latter half of the year and caused 6 deaths. Diarrhœa caused four deaths only, although the disease prevailed extensively. Influenza prevailed in April and caused one death, and again in December, when a marked feature was the greater prevalence of inflammation of the tonsils. Puerperal fever caused one death.

Sanitary Inspection.—The annual visit to the sources of water supply was made in June. The filtering tanks, buildings, and machinery were found in good order. No pollution caused by lead mines. The pollution of the Greta by the sewage of Keswick and the various villas along the river and lake is as great as ever. The dangers of an outbreak of cholera or typhoid fever at Keswick are indicated. No. 4 Armstrong's Yard, Crosby Street, and 57 High Street, were condemned as unfit for habitation. The usual measures for the prevention of cholera were recommended and carried out with complete success. Several notifications from Port Sanitary Authorities of the departure of persons from infected ports were received, and such persons were visited and found free from disease. Vessels from infected ports were also inspected. One fatal case of English Cholera occurred, and precautionary measures were adopted.

The Isolation Hospital is rapidly approaching completion.

Tables A and B are appended.

MILLOM (URBAN).

Medical Officer of Health - - P. BUTLER STONEY.

Area in acres 1,311.

Population, census, 1891, 8,857 ; estimated population to middle of 1893, 9,268.

Birth rate 36.4.

Death rate 18.002.

Zymotic rate 3.80 ; death rate, phthisis 1.6, and from respiratory diseases, 4.2 per 1,000 of the population ; rate of deaths under one year per 1,000 births, 185.

During the year 167 deaths were registered, including 18 deaths from measles, 2 from scarlet fever, 3 from diphtheria, 2 from enteric fever, and 11 from diarrhœa. The notifications were scarlet fever, 64 ; diphtheria, 7 ; enteric fever, 9 ; erysipelas, 7. Of the diarrhœa cases 9 were under 5 years of age. The disease was very prevalent during the summer months, and of a severe type. Influenza prevailed during the greater part of the year, and caused two deaths. The measles epidemic was a very severe one, and the schools were closed for a time. Precautions were taken against small pox, but no cases occurred. Vaccination is reported as unsatisfactory, there being 119 children unvaccinated during the year.

Sanitary Inspection.—The sanitary condition of the district continues to improve. There are 1,731 houses, an increase of 47 over last year, and a house to house inspection has been made at least once during the year, and further visits to houses where infectious diseases occurred or where nuisances were reported. Five common lodging houses, 11 slaughter houses, and 13 bakehouses were inspected. Scavenging continues to be well done by the Board's men and horses. Sewerage is very satisfactory. For four months an Inspector was appointed to visit all ships arriving at Duddon Port, and 278 ships were inspected. A temporary wooden building for four female patients has been erected till the complete Hospital is ready. A brick built mortuary, washhouse, and ambulance shed, and a steam disinfecter have been erected near the hospital site at considerable cost. A horse ambulance has been obtained and is ready for use.

Tables A and B are appended, and a report from the Sanitary Inspector, and also one from the Assistant Inspector of Shipping are enclosed.

PENRITH (URBAN).

Deputy Medical Officer of Health - D. G. PEARCE THOMSON.

Area in acres 7,587.

Population, census 1891, 8,981; estimated population to middle of 1893, 9,157.

Birth rate 30.63.

Death rate 19.22.

Zymotic rate 2.07.

Death rate from phthisis 1.8, and from respiratory diseases 1.7 per 1,000 of the population; rate of deaths under one year to 1,000 births, 120.9.

There were 176 deaths during the year in the parish of Penrith, and 14 in the Workhouse. Including the latter, the death rate is 20.74. There were three deaths from diarrhœa, four from whooping cough, two from measles, one from enteric fever, 14 from scarlet fever, and two from small pox. The epidemic of scarlet fever was very severe, 183 cases being reported. The schools were closed and disinfected, and 19 cases were removed to the hospital. There were ten cases of small pox and two deaths, the first case being an inmate of the Workhouse Hospital, who probably contracted the disease from an unrecognised case in the same hospital. Five cases of enteric fever were notified, three being in the Workhouse Hospital. Four cases of diphtheria occurred and all recovered. There were five cases of erysipelas.

Sanitary Inspection. The water supply has been fully under consideration, and after discussion the Board resolved "That the present scheme of water supply be retained, and that the Special Water Committee be empowered to carry out such of the improvements as are contained in Mr. Deacon's reports and letters as they may deem necessary." The present supply is contaminated by the villagers on both sides of the river Eamont, and the reports for 1884, 1885, 1886, 1891, and 1892 pointed to the dangers of sewage contamination.

A new ambulance has been provided. Many nuisances have been removed, water-closets and earth-closets substituted for privies, and the more efficient drainage of the district beyond the Railway Bridge is under consideration. The drainage of Eamont Bridge is also receiving attention. The sanitary condition of the town has been much improved during the year. Full particulars are given of the precautions to be adopted against cholera.

Plans for a new Isolation Hospital have been approved, and the work is in progress.

Several tables of statistics are appended.

WHITEHAVEN (URBAN).

Medical Officer of Health - - - J. B. FISHER.

Area in acres 723.

Population, census 1891, 18,038; estimated population to middle of 1893, 18,000.

Birth rate 29.

Death rate 18.77.

Zymotic rate 2.05.

Death rate from phthisis 1.6, and from respiratory diseases, 4.27 per 1,000 of the population; rate of deaths under one year per 1,000 births, 145.5.

The number of deaths during the year was 338. In the Preston Quarter the death rate was 15.76, and in Whitehaven Township, 20.24. Of deaths due to zymotic causes five were due to scarlet fever, one to typhus, two to enteric fever, five to diarrhoea, 24 to whooping cough. There were 165 notifications, viz., 134 scarlet fever, 12 enteric fever, 11 erysipelas, five diphtheria, one small pox, one typhus, and one continued fever. Ten cases of enteric fever, six from one house, were removed to the Hospital at Bransty. In March a case of small pox occurred in a lodging house, and was removed to a temporary hospital previously provided for such cases, and no further case occurred. The valuable assistance rendered by the police, by the directions of the Chief Constable, Mr. Dunne, is commented on in the report. The origin of the typhus case could not be traced. The epidemic of scarlet fever was worst during the last quarter. Whooping cough also prevailed extensively.

Sanitary Inspection.—The district was regularly inspected; 391 water-closets were found defective, 47 drains from waste-water gulleys blocked, 24 houses or tenements overcrowded, and 46 gully traps defective. Ten tenements and one separate house were compulsorily closed under the "Housing of the Working Classes Act, 1890." Nine barrels of pears, 51 cheeses, and 3 barrels of herrings were seized and destroyed.

Application was made to borrow £4,500 for the erection of a new Hospital for Infectious Diseases at Bransty, and this has been granted.

The question of the Port Sanitary Authority is still regarded as unsatisfactory. The Rural Sanitary Authority are legally the responsible Authority, and are not in touch with the Customs Officers and Harbour Officials.

Attention is called to dangerous overcrowding at Newhouses.

Several statistical tables and the Inspector's report are appended.

WIGTON (URBAN).

Medical Officer of Health - - THEOBALD A. PALM.

Area in acres 774.

Population, census 1891, 3,965 ; estimated population to middle of 1893, 3,965.

Birth rate 29.76.

Death rate 17.65.

Zymotic rate 1.

Death rate from phthisis 2. and from respiratory diseases 4.28 per 1000 of the population ; rate of deaths under one year per 1000 births, 169.4.

There were 86 deaths recorded, and of these 16 occurred in the Workhouse ; of these, five only were proper residents in the district. If all the deaths are included, the death rate is 21.18. There were three cases of small pox and one death ; all were tramps and were lodged in the Workhouse. Records were kept of the movements of tramps from suspected districts, and valuable assistance was rendered by the Police. Scarlet fever caused two deaths. The Notification Act is not in force, and it is therefore not possible to say how many cases occurred. There were two cases of typhoid fever, one fatal, the disease being probably contracted outside the district, and the other caused by a filthy privy. Influenza was very prevalent in the last quarter of the year. The most frequent cause of death was senile decay (12 cases), and the next most frequent, pneumonia (nine cases).

Sanitary Inspection.--Regret is expressed that more progress is not made in connecting the privies with the sewers. Last year a list of 44 privies still unconnected was given. During the year six have been connected. Seven of the 44 were marked as requiring urgent attention, and only one has received it. The erection of a public urinal has been repeatedly urged. The nuisance arising from the pollution of the Burnfoot Beck by the bate-liquor from a tanyard occupied much attention in the early part of the year, but steps have been taken to abate the the nuisance. It is recommended that the bate-liquor should be run into the sewers. The lodging-houses and slaughter-houses have been inspected, and have been found fairly well conducted.

Tables A and B are appended.

WORKINGTON (URBAN).

Medical Officer of Health - - JOHN HIGHTET.

Area in acres 1,694.

Population, census 1891, 23,490. Estimated population to middle of 1893, 23,000.

Birth rate 35.7.

Death rate 16.

Zymotic rate 1.3.

Death rate from phthisis .95, and from respiratory diseases, 2.04 per 1,000 of the population; rate of deaths under one year per 1,000 births, 131.1.

During the year the deaths numbered 368. There were 403 notifications under the Act, viz.:—Scarlet fever, 306; diphtheria, 52; enteric fever, 16; small pox, 3; erysipelas, 22; membranous croup, 3; and puerperal fever, 1. The type of the scarlet fever epidemic was mild. The first small pox case occurred in a tramp from Yorkshire. He was removed to Ellerbeck Hospital. One of the Board's servants who had been engaged in the destruction of the bedding at the lodging house where the disease broke out, contracted the disease, and the daughter of the keeper of the Infectious Hospital also contracted it. Six cases were treated in the Infectious Hospital during the year, viz.:—Three small pox and three scarlet fever.

Sanitary Inspection.—Great improvement has been effected in the water supply during the year, but some parts of the district have still an inadequate supply. The dangers of trough closets were dealt with in one of the monthly reports. The sewers and gullies throughout the district require a more systematic flushing and disinfection. The general scavenging of the district leaves much to be desired, being performed in a somewhat slovenly and perfunctory manner. The cesspool at Mountain View should be disinfected and filled up. The same remark applies to New Yard District. The adoption of the following Acts is recommended, viz.:—"The Working Classes Dwellings Act, 1890," "The Infectious Diseases Prevention Act, 1890," "The Public Health Acts (Amendment) Act, 1890," "The Housing of the Working Classes Act, 1890."

The condition of many of the back lanes presents a disgraceful appearance. The "midden" system at the Railway Cottages requires attention.

The Sanitary Inspector gives a summary of nuisances for the year.

ALSTON No. 1 OR LOW DISTRICT (RURAL).

Medical Officer of Health - - STEWART CARSON.

Area in acres 12,000.

Population, census 1891, 1,709; estimated to middle of 1893, 1,709.

Birth rate 21.

Death rate 13.4.

Zymotic rate 1.17.

Death rate from phthisis 1.17, and from respiratory diseases nil per 1000 of the population; rate of death under one year to 1,000 births, 27.7.

During the year 26 deaths were registered, giving a death rate of 15.2; but excluding two deaths in the workhouse and that of a child belonging to a travelling circus, the rate is reduced to the figure above stated. There were two deaths from diphtheria. The number of deaths registered is the smallest for 20 years; the ages of eight, or 32 per cent. of the whole, range from 71 to 91. Two cases of scarlet fever, and three of scarlatinal sore throat came under observation. Influenza prevailed during the first quarter of the year and extensively during the last two months, necessitating the closing of the High School for 10 days. Diphtheria was imported from Spennymoor, Durham; six cases and one death resulted from this imported infection. A mild case occurred in August, but cause was not ascertained. A fatal case occurred in a van belonging to a travelling circus. Overcrowding and close proximity to a foul midden were undoubtedly the originators of the disease.

Sanitary Inspection.—Over 12 stones of putrid meat were seized in a butcher's shop, the butcher having disappeared. There is occasional scarcity of water at the Townhead Wells, due to the small temporary tank at Chapel Road not being at a sufficiently high level. Steps are being taken to remedy this, and further extension of the works is contemplated. Several nuisances due to middens or privy middens exist, and some of these are defective in structure. A number of houses are not provided with closet or ashpit accommodation; in consequence of this, household refuse and other filth are deposited on the waste lands belonging to the Admiralty. Burnbank has been kept much cleaner during the year, but ashes and other filth are still deposited there, and on the banks of the river Nent near the Station Gates. The middens and ashpits cause grave reasons for complaint.

Tables A and B are appended.

ALSTON (RURAL) No. II OR HIGH DISTRICT.

Medical Officer of Health - - - E. W. SHORT.

Area in acres 24,000.

Population, census 1891, 1,675 ; estimated population to middle of 1893, 1,675.

Birth rate 26.86.

Death rate 17.91.

Zymotic rate 0.59.

Death rate from phthisis 1.78, and from respiratory diseases 2.38 per 1,000 of the population ; rate of deaths under one year to 1,000 births, 88.8.

There were 30 deaths during the year. Of these, seven were caused directly by influenza, and the death rate from respiratory diseases is probably indirectly influenced by the same cause. The infantile mortality shows a considerable reduction on the previous year. In Nenthead there were 21 deaths, in Garrigill only nine, the increase in the first-named place being due to the greater virulence of the influenza which prevailed there. Two mild cases of scarlet fever occurred at Nenthead. The source could not be traced. There was one death from puerperal fever there also. Towards the end of the year influenza appeared again. It is the fourth epidemic of this disease since 1890, and the most virulent. Hardly a house escaped. Both Nenthead and Garrigill Schools were closed in consequence. An epidemic of diarrhoea occurred during the summer, due to atmospheric influences. There were three deaths from phthisis, all lead miners, and all above 40.

Sanitary Inspection.—Both Nenthead and Garrigill have been frequently inspected. Drains and privies have been visited, minor nuisances removed and neglected middens attended to. The greatest sanitary work of the year has been the laying down of new pipes to the Nenthead and Hillersdon Wells. The water supply to these wells is anything but satisfactory. Sometimes it is scanty, sometimes cut off by blocking of the pipes by roots of trees, and sometimes contaminated by surface water. Sixty yards of cast iron piping has been laid from Dykeshead to the plantation at Whitehall : from the latter place to Hillersdon Wells, 3-inch sanitary pipes were used. Similar improvements have been made in connection with Nenthead Well.

Tables A and B are appended.

BOOTLE (RURAL).

Medical Officer of Health - - - W. B. GRIFFITH.

Area in acres 91,688.

Population, census 1891, 5,982; estimated to middle of 1893, 5,982.

Birth rate 20.8.

Death rate 18.22.

Zymotic rate 1.6.

Death rate from phthisis .5, and from respiratory diseases 2.6 per 1,000 of the population; rate of deaths under one year to 1,000 births, 122.

There were 109 deaths during the year, being six more than in the previous year, and 41 were from 65 to 91 years of age. There were two fatal cases of small pox, both in unvaccinated subjects. Diarrhoea occurred in several parts of the district, and printed notices on the subject were issued. Outbreaks of measles and whooping cough occurred in various parts of the district, but the type in both was mild. At Hill of Millom, Bootle, Drigg, and Seascale, the epidemic prevailed, and schools were closed for variable periods.

Sanitary Inspection.—During the severe drought of summer the water supply at the Hill of Millom was inadequate, and representations having been made to the Local Authority, a fresh and purer supply was obtained. Some objections and fault-finding with the water supply at Silecroft was amicably arranged. The inhabitants of Ravenglass are indebted to Lord Muncaster for “the voluntary boon on his part of an efficient, unlimited, pure, and wholesome water supply,” delivered by tap to every householder. Efficient drainage of superfluous water at Eskdale Green occupied attention, and a scheme is under consideration. The butcheries and school premises have been regularly inspected.

A suggestion is made that the County Council should originate and authorise a course of lectures in every district by their respective Medical Officers of Health, on “Infectious diseases, their cause, origin the best means to combat them, to prevent their spread, and effect their suppression.”

Tables A and B are appended.

BRAMPTON (RURAL).

Medical Officer of Health - - Wm. SYMINGTON.

Area in acres 97,705.

Population, census 1891, 9,754; estimated population to middle of 1893, 9,754.

Birth rate 23.68.

Death rate 17.32.

Zymotic rate 3.28.

Death rate from phthisis .92, and from respiratory diseases 2.35 per 1,000 of the population; rate of deaths under one year to 1,000 births, 116.8.

The number of deaths registered during the year was 169. Deducting four deaths of persons who did not belong to the district the rate is 16.91. There were 22 deaths from measles or complications of that disease, seven from scarlet fever, two from puerperal fever, and one from typhoid fever. There were nine deaths from phthisis. In Brampton Sub-District the death rate was 22.03, and in Brampton Parish, 30.10; in Farlam, 15.31; in Midgeholme, 14.10; in Nether Denton, 5.64; in Upper Denton, 23.93; in Hayton Sub-District, 8.38; and in Walton Sub-District, 13.16. Scarlet fever prevailed in several parts of the district during the year. The type was on the whole mild, but two virulent cases occurred in the Walton District. One case of diphtheria occurred at Hayton, and resulted in recovery. During the second and third quarters an epidemic of measles of a more virulent and fatal type than has occurred for many years visited Brampton and surrounding district. The disease was imported from Newcastle. The Board School was closed, but without any appreciable effect. The disease extended to Farlam and Hallbankgate, where the school was closed with benefit. Several cases occurred in other districts. About 500 cases occurred. There were eight cases of typhoid fever. Influenza prevailed in the early portion of the year.

Sanitary Inspection.—A large number of systematic inspections were made. The sanitary condition of the town of Brampton and the other villages is satisfactory. A number of inspections were made in connection with the scheme of bringing a better water supply for the Castlecarrack, Hayton, and Irthington Districts, but the offer of a better supply was withdrawn on account of strong opposition. The pollution of Carling Gill Beck by polluted matter from a dairy has been examined, and a complaint of pollution of Brampton Beck from a skin yard is engaging attention.

Tables A and B are appended.

CARLISLE (RURAL).

Medical Officer of Health - - C. S. HALL.

Area in acres 67,898.

Population census 1891, 16,009 ; estimated population to middle of year, 16,000.

Birth rate 26.

Death rate 19.4.

Zymotic rate 0.9.

Death rate from phthisis 1.93, and from respiratory diseases, 2. per 1,000 of the population ; rate of deaths under one year to 1,000 births, 100.7.

There were 311 deaths registered during the year, and of these the deaths from zymotic diseases numbered 15, comprising three from scarlet fever, two from diphtheria (1 at Stanwix and 1 at Shawkfoot), two from whooping cough, and ten from diarrhœa. Two deaths of persons belonging to the district, one from diphtheria, and one from scarlet fever, occurred in the Carlisle Fever Hospital. The number of cases notified was 241, viz., scarlet fever, 110 ; measles, 91 ; erysipelas, 21 ; diphtheria, 12 ; typhoid fever, five ; and puerperal fever, two. The notification of measles has been very valuable for schools. Scarlet fever occurred at Belle Vue, Great Orton, and Cummersdale. At the latter place the school was closed. There was a serious outbreak of diphtheria at Swaithwaite Head, one case at Edentown, and one at Crook Dyke, Rockcliffe. Measles prevailed as an epidemic at Cumwhinton and Cotehill. An outbreak of anthrax at High Crosby is mentioned. The disease is rarely conveyed to human beings.

Sanitary Inspection—The Carlisle Water Committee have extended their system so as to supply Belle Vue, Durran Hill, and Scotby. The state of Kingstown is described as fairly satisfactory. A report on the disposal of slop water was forwarded to the Local Government Board. Improvements in the drainage of Stanwix, Edentown, and Etterby are under consideration. A Parochial Committee has been formed at Beaumont, and a new water scheme is in a fair way of accomplishment. Some cottages at Heads Nook as well as the railway station are in need of water. The matter is under consideration. An important undertaking for obtaining a water supply for Wetheral is being actively considered. The condition of the Midland Cottages, London Road, Carlisle, is described. The houses are built in a hollow and efficient drainage is very difficult. Some important improvements have been carried out.

Several statistical tables are appended.

COCKERMOUTH (RURAL).

Medical Officer of Health - - JOHN ROBERTSON.

Area in acres 164,081.

Population, census 1891, 29,497 ; estimated population to middle of 1893, 30,642.

Birth rate 30.8.

Death rate 13.2.

Zymotic rate 1.14.

Death rate from phthisis .75, and from respiratory diseases, 2.74 of the population ; rate of deaths under one year to 1000 births, 122.6.

There were 405 deaths registered during the year. The heaviest mortality was during the fourth quarter, owing to the prevalence of whooping cough, scarlet fever, and influenza catarrh, the latter invading the majority of the townships and necessitating the closing of Elementary Schools. The zymotic deaths were as follows:—Measles, five ; scarlet fever, three ; whooping cough, 10 ; diphtheria, one ; enteric fever, one ; and diarrhoea, 15. In the Keswick Rural District the death rate was 11.4. Outbreaks of scarlet fever occurred in several of the townships, but there was only one death. In the Cockermouth Rural District the death rate was 11.9. There was a decrease in infectious diseases, but a slight increase in tubercular diseases. In the Workington Rural District the death rate was 13.8. An epidemic of whooping cough prevailed, and the Infants' Schools were closed. In the Maryport Rural District the death rate was 14.1. Measles appeared in epidemic form at Plumbland and Bothel. The Public Elementary and Sunday Schools were closed for six weeks. Scarlet fever prevailed from May at Plumbland, Gilcrux, and Ellenborough, and the Public Schools were closed. In December three cases of small pox occurred at Dalehead Post Office, Legburthwaite. The Post Office was closed. The infection was probably from infected parcels. Diphtheria caused one death at Crosby. Whooping cough was exceedingly prevalent in many townships.

Sanitary Inspection.—There were 105 unsanitary dwellings reported and 85 repaired. There was over-crowding in about 20 instances. The total number of nuisances abated was 4,770, and of these 3,875 were redressed by statutory notice. There were 119 noxious privies converted into water closets. In 10 houses the water supply was improved. Braithwaite has now a good supply. At Wyndham Row and Great Clifton the supply was intermittent. The sewerage at the west end of Ellenborough is completed. The pail system for the disposal of the Goat sewage was temporarily adopted.

A scheme for isolation hospitals was prepared.

During the year 77 purveyors of milk were registered.

Several statistical tables and the Sanitary Inspector's tables are appended.

LONGTOWN (RURAL).

Medical Officer of Health - - S. F. Mc LACHLAN.

Area in acres, 94,173.

Population, census 1891, 7,181; estimated population to middle of 1893, 7,181.

Birth rate 24.92.

Death rate 15.87.

Zymotic rate 1.25.

Death rate from phthisis 1.25, and from respiratory diseases, 2.36 per 1,000 of the population; deaths under one year to 1,000 births 88.2.

There were 114 deaths registered during the year. In the High District the death rate was 11.30, and in the Low District, including the Workhouse it was 17.79, or excluding the Workhouse 16.12. In Longtown the death rate was 17.30. The deaths from zymotic diseases were as follows:—diphtheria, two; typhoid fever, two; puerperal fever, three; erysipelas, one; measles, one. The lowest death rate was in Stapleton, viz., 6.41, and the highest in Scaleby, viz., 25.77. In Nicholforest it was 18.38; in Bewcastle 11.25; in Arthuret (excluding workhouse) 15.35; in Kirklington 14.60, and in Kirkandrews 16.41. There have been fewer deaths than in any year since 1881. The death rate from phthisis has largely diminished. There were 39 cases of scarlet fever, 19 in the High District, 17 in the Low District, and 3 in the Workhouse. The Moat School and Park School were closed. Measles occurred at Mossedge, Nicholforest, and Westlinton. Eight cases of enteric fever were reported, seven being at Lowparkfoot, Stapleton, where the sanitary surroundings were very unsatisfactory. There were two cases of diphtheria at Scaleby, and five at Longtown. At Longtown the school was closed and various sanitary defects remedied.

Sanitary Inspection.—Several houses were visited and reported. Some have been repaired and defects remedied. The Longtown water supply was investigated. There were 333 houses with a good supply from 90 pumps, and 122 houses with a defective supply. Of the latter 36 houses had 9 pumps out of order, and 47 had no water supply. In some cases the supply has been improved. The want of water at Kinkry Hill was reported. Mossedge and Bolton Fell have a prospect of a plentiful supply of good water. The common lodging-houses and slaughter-houses are kept in fairly good order.

PENRITH (RURAL).

Deputy Medical Officer of Health—D. G. PEARCE THOMSON.

Area in acres 180,674.

Population, census 1891, 13,595; estimated to middle of 1893, 13,539.

Birth rate 27.

Death rate 13.4.

Zymotic rate .22.

Death rate from phthisis .6, and from respiratory diseases, 2.5 per 1000 of the population; rate of deaths under one year to 1,000 births, 95.6.

There were 182 deaths registered during the year, and five from zymotic causes, viz., two from measles, two from membranous croup, and one from scarlet fever. Influenza caused five deaths, and two were due to whooping cough. Scarlet fever was epidemic in a large part of the district during the year, 76 cases being reported. In Maughanby, Hunsonby, and Renwick the schools were closed with the best results. Cases were reported from Skelton, Calthwaite, Edenhall, Maughanby, Winskill, Hunsonby, Gamblesby, Kirkoswald, Renwick, Unthank, Melmerby, Catterlen, Blencairn, Lazonby, Glassonby, High Hesketh, Low Hesketh, Redhills, Drybeck, Nunclose, Plumpton, and Motherby. Three were removed to the hospital. Seven cases of diphtheria were notified. In one case at Mellguards the house was damp and mouldy. There were three cases of small pox at Threlkeld, the infection being traced to Legburthwaite.

Sanitary Inspection.—The water supply at Great Salkeld has been improved. Ousby is badly supplied, and a fresh source is indicated. At Culgaith Bushy Well is polluted with sewage and requires attention. Four houses at Mungrisdale receive water from a polluted stream. Some houses in Greystoke require attention. Bunton Byers Cottages near Calthwaite have defective water supply. Town Nook Well at Hutton End was found to be contaminated with sewage. Some cottages at Dacre have a defective supply. The water supply at Crow Wood Cottage, Langwathby, is unfit for use. Gamblesby and Glassonby have got a new and satisfactory supply. Drainage works have been carried out at Stainton, Green Houses, Culgaith, and Armathwaite. At Lazonby and Langwathby new schemes are under consideration. Several farm-houses at Middleseugh are in a most insanitary condition. The precautions against cholera are considered, and several statistical tables are added.

WHITEHAVEN (RURAL).

Medical Officer of Health - - J. B. FISHER.

Area in acres 78,678.

Population, census 1891, 15,071 ; estimated population to middle of year 15,100.

Birth rate 29.33.

Death rate 16.09.

Zymotic rate .99.

Death rate from phthisis 1.52, and for respiratory diseases 3.84 per 1,000 of the population; rate of deaths under one year to 1,000 births, 121.8.

There were 253 deaths registered during the year, and of these 39 were those of persons not belonging to the district. Deducting these the corrected death rate stands at 14.17. There were 15 deaths from zymotic diseases, viz., 10 from whooping cough, one from enteric fever, and four from diarrhoea. The enteric fever case occurred at Hensingham and was due to faulty drains. The lowest death rate occurred in the Harrington Sub-District, viz., 12.67. In St. Bees it was 16.41, and in Egremont, 13.54. During the year 72 cases of scarlet fever, three of enteric fever, one of puerperal fever, and three of erysipelas, were reported. There is much ignorance in the district with regard to the virulence and persistence of the infection in scarlet fever and other infectious diseases. In Distington, the schools were closed to prevent the spread of scarlet fever. The schools were thoroughly disinfected. The three cases of enteric fever all occurred in one house.

Sanitary Inspection.—At Parton an improved system of sewerage has obtained the sanction of the Local Government Board. At Distington no progress is reported and it heads the list for infectious diseases. The sewerage of Hensingham has made satisfactory progress. A large number of minor sanitary defects were remedied on verbal notice. There were 66 written notices served, and 64 complied with. The water supply of How Gate, Moresby, has been much improved, the water being now from a source free from the risk of contamination. The storage for water at Sandwith has been much improved by the erection of a tank holding 1,250 gallons.

Several statistical tables are appended.

WIGTON (RURAL).

Medical Officer of Health - - W. PERRY BRIGGS.

Area in acres 108,918.

Population, census 1891, 15,936; estimated population to middle of 1893, 13,136.

Birth rate 25.1.

Death rate 13.7.

Zymotic rate .39.

Death rate from phthisis .99, and from respiratory diseases 1.83 per 1,000 of the population; rate of deaths under one year to 1,000 births, 69.4.

As Aspatria has been converted into an Urban District it no longer forms a part of this district, and the change has diminished the rates of mortality. The number of deaths registered was 181. The annual rates in the Caldbeck District were 14.5, Wigton District 12.8, and Aspatria District 14.09. The deaths from zymotic causes were scarlet fever three, whooping cough one, and diphtheria one. There were 65 deaths in persons above 65. Under the Notification Act, which has made notification compulsory since May 15, there were 127 certificates, of which 119 were from medical practitioners. Of these, 121 were for scarlet fever, two typhoid fever, three erysipelas, and one diphtheria. During the first half of the year measles and whooping cough prevailed in different parts of the Union, and since June scarlet fever has prevailed in a great majority of the villages. There was one case of small pox at Crofton.

Sanitary Inspection.—Six schools have been closed during the year on account of epidemics; Kirkbampton for measles in February and March, Blennerhasset for scarlet fever, Blencogo scarlet fever, Westnewton scarlet fever, Bolton New Houses scarlet fever, private school at Mealsgate scarlet fever. In Blennerhasset the epidemic was very protracted; the houses are closely packed, and many too crowded. Sanitary Committees for such districts would be useful. The ashpit nuisance is the greatest of all in the different localities. The following are the chief sanitary defects:—Defective drainage, 28 cases; insanitary privies, 16; insanitary ashpits, 68; polluted wells, 4; defective spoutings 5; nuisances, 47; houses closed as unfit for habitation, 1; houses filthy and injurious to health, 1. The defective condition of drainage at Hayton and Welton is under consideration. Two sites suggested for the Hospital for infectious diseases were inspected, but the matter is still in abeyance. The necessity for a disinfecting chamber for articles of clothing and bedding is strongly urged, and superheated steam is strongly recommended. It is suggested that the chamber should be built by the County Council.

Several statistical tables are added.

WORKINGTON (PORT).

Medical Officer of Health - - J. C. HODGSON.

During the year 83 steamers and 78 sailing vessels were inspected. Some wanted cleansing, which was done when notice was served. No case of infectious disease has entered the port during the year. The docks and harbour are maintained in good sanitary condition. Regarding the memorandum of recommendations made by Dr. Thompson, no additional Inspector has been made as yet. Mr. Archibald acts for both Workington and Harrington. Additions are being made to the hospital to make it more complete. A mortuary is also being built. All infected clothing which cannot be disinfected is to be destroyed. Arrangements have been made for the speedy removal of patients to the hospital and also for the burial of the dead. Notice has been given to adopt "The Infectious Diseases (Notification) Act of 1889." In the event of cholera occurring in any British port with which Workington or Harrington is in shipping communication, vessels arriving coastwise from such ports will receive prompt attention. Arrangements for night inspection could at once be made.

